UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/833,043	04/12/2001	Yushi Niwa	070639/0134	2389

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EXAMINER
MILLER, BRANDON J

ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/833,043	NIWA, YUSHI
	Examiner	**Art Unit**
	Brandon J Miller	2683

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-10</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-10</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). <u>5</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s). _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view

of Raith.

Regarding claim 1 Jones teaches a data distribution system (see col. 4, lines 44-62).

Jones teaches a mobile information table for storing reference required time periods which are

references of required time periods required when a radio terminal moves to a destination that is

a place of a destination of movement from departure places which are origins of movement,

respectively (see col. 6, lines 35-51). Jones teaches a place where utilization of information

distributed in advance is conducted by means of a radio terminal, in accordance with mobile

means that is used for movement (see col. 4, lines 46-62 and col. 8, lines 52-59). Jones teaches

specifying departure places and destinations stored in this mobile information table in

accordance with a movement schedule together with starting time of the movement and the

mobile means (see col. 6, lines 35-64). Jones teaches calculating an error in a reference time

period when the radio terminal arrives at the respective destinations, based on information

specified by movement specifying means (see col. 7, lines 34-42). Jones teaches data

distribution plan information generating means for obtaining the time when the radio terminal

arrives at a destination from the respective departure places using the mobile means specified by

movement specifying means by correcting an error calculated by the error calculating means from the time in case of using the reference required time periods, as time when it arrives at the destination most quickly within a range of error (see col. 7, lines 56-66 and col. 11, lines 40-52). Jones teaches arrival time point detecting means for comparing arrival time corrected for each destination, which is generated by data distribution plan information generating means, with current time, and detecting a time point when radio terminal arrives at respective destinations (see col. 11, lines 1-11 & 40-52). Jones teaches distribution data storing means for storing a data to be distributed for every destination (see col. 12, lines 36-40 and Fig. 3). Jones teaches distributing a distribution data corresponding to a destination from the distribution data storing means every time arrival time point detecting means detects arrival of a radio terminal at the respective destinations (see col. 12, lines 56-59). Jones does not specifically mention movement schedules including date and hour of movement. Raith teaches information including date and hour of movement (see col. 4, lines 21-28 & 55-58). It would have been obvious at the time the invention was made to make the device adapt to specifically include movement schedules including date and hour of movement because this would allow for an improved database for storing and retrieving location specific information.

Regarding claim 2 Jones and Raith teach a device as recited in claim 1 except for an error table, a coefficient table for storing variation coefficients of an error in date and hour at departure; and calculating an error by multiplying a corresponding error by variation coefficients of an error in date and hour at departure. Jones does teach representing a standard error of dispersion in time of arrival from a departure place to a destination in accordance with a mobile mean, storing variations of an error in time at departure, calculating an error using a

corresponding entry of an error in time at departure (see col. 11, lines 1-11 & 39-79). Raith does teach information including variations in date and hour of departure (see col. 4, lines 55-58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include an error table, a coefficient table for storing variation coefficients of an error in date and hour at departure; and calculating an error by multiplying a corresponding error by variation coefficients of an error in date and hour at departure because this would allow for efficient updating of location specific information.

Regarding claim 3 Raith teach variation of an error in date and hour that are different from each other dependent upon the day (see col. 4, lines 55-58).

Regarding claim 4 Jones teaches replacing distribution data distributed when a radio terminal arrived at a previous destination by the destination data distributed when the above-mentioned radio terminal arrived at the new destination (see col. 13, lines 35-40 & 48-55).

Regarding claim 5 Jones teaches a mobile information table that is suitably updated by means of the newest information (see col. 13, lines 35-40 & 48-55).

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Chern.

Regarding claim 6 Jones teaches a data distribution system based on longitude and latitude representing a typical position in destinations that are places where utilization of information distributed in advance is conducted by means of a radio terminal, and areas of those destinations, using longitude and latitude for contrasting errors between typical position and other positions in destinations and storing them (see col. 4, lines 44-62 and col. 5, lines 10-26 & 37-43). Jones teaches destination specifying means for specifying destinations stored (see col. 6,

lines 35-39); and measuring longitude and latitude at respective time points during movement of a radio terminal (see col.5, lines 20-26 & 37-40). Jones teaches arrival time point detecting means for detecting a time point when a position measured arrives within a range of errors centering around a typical position of a corresponding destination stored, when a radio terminal moves to a specified destination (see col. 11, lines 1-11 & 40-52). Jones teaches distribution data storing means for storing a data to be distributed for every destination (see col. 12, lines 36-40 and Fig. 3). Jones teaches distributing a distribution data corresponding to a destination from the distribution data storing means every time arrival time point detecting means detects arrival of a radio terminal at the respective destinations (see col. 12, lines 56-59). Jones does not specifically mention a latitude and longitude table for specifying destinations stored. Chern teaches using stored latitude and longitude information for specifying a corresponding location (see col. 4, lines 13-20). It would have been obvious at the time the invention was made to make the device adapt to specifically include a latitude and longitude table for specifying destinations stored because this would allow for more efficient retrieval of location specific information.

Regarding claim 7 Jones teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Raith and Chern.

Regarding claim 8 Jones teaches a data distribution system (see col. 4, lines 44-62). Jones teaches a mobile information table for storing reference required time periods which are references of required time periods required when a radio terminal moves to a destination that is a place of a destination of movement from departure places which are origins of movement,

respectively (see col. 6, lines 35-51). Jones teaches a place where utilization of information distributed in advance is conducted by means of a radio terminal, in accordance with mobile means that is used for movement (see col. 4, lines 46-62 and col. 8, lines 52-59). Jones teaches specifying departure places and destinations stored in this mobile information table in accordance with a movement schedule together with starting time of the movement and the mobile means (see col. 6, lines 35-64). Jones teaches measuring longitude and latitude at respective time points during movement of a radio terminal (see col.5, lines 20-26 & 37-40). Jones teaches calculating an error in a reference time period when the radio terminal arrives at the respective destinations, based on information specified by movement specifying means (see col. 7, lines 34-42). Jones teaches data distribution plan information generating means for obtaining the time when the radio terminal arrives at a destination from the respective departure places using the mobile means specified by movement specifying means by correcting an error calculated by the error calculating means from the time in case of using the reference required time periods, as time when it arrives at the destination most quickly within a range of error (see col. 7, lines 56-66 and col. 11, lines 40-52). Jones teaches arrival time point detecting means for comparing arrival time corrected for each destination, which is generated by data distribution plan information generating means, with current time, and detecting a time point when radio terminal arrives at respective destinations (see col. 11, lines 1-11 & 40-52). Jones teaches distribution data storing means for storing a data to be distributed for every destination (see col. 12, lines 36-40 and Fig. 3). Jones teaches distributing a distribution data corresponding to a destination from the distribution data storing means every time arrival time point detecting means detects arrival of a radio terminal at the respective destinations (see col. 12, lines 56-59).

Jones does not specifically mention movement schedules including date and hour of movement or a latitude and longitude table for specifying destinations stored. Raith teaches information including date and hour of movement (see col. 4, lines 21-28 & 55-58). Chern teaches using stored latitude and longitude information for specifying a corresponding location (see col. 4, lines 13-20). It would have been obvious at the time the invention was made to make the device adapt to specifically include movement schedules including date and hour of movement or a latitude and longitude table for specifying destinations stored because this would allow for an improved database for storing and retrieving location specific information.

Regarding claim 9 Jones teaches a device as recited in claim 4 and is rejected given the same reasoning as above.

Regarding claim 10 Jones teaches a device as recited in claim 5 and is rejected given the same reasoning as above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bar U.S. Patent No. 6,456,852 discloses an Internet distributed real-time wireless location database.

Kynast U.S. Patent No. 6,594,282 discloses method for linking digital descriptions of traffic route networks and location database.

Negishi U.S. Patent No. 5,974,330 discloses a portable telephone with current location display and network therof.

Yost U.S. Patent No. 6,097,959 discloses a system and method for accurate positioning of mobile terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J Miller whose telephone number is 703-305-4222. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

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January 9, 2004

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
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